Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled data based on original data using

LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

Brand: McGRAW-EDISON

Report Number: P636978

Luminaire Tested: GWS-SA4B-830-U-AFL-W-GRSWH

Issue Date: 1/10/2023

Report Generated By 670246102 / DESKTOP-G35701P

Cooper Lighting Solutions Photometric Lab
1121 Highway 74 South
Peachtree City, GA 30269

Scaled Data Report

Test Information

Test Method:	LM-79-2019
Report Number:	P636978
	TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2209-782-47)
Test Lab:	COOPER LIGHTING SOLUTIONS
Issue Date:	1/10/2023
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	McGRAW-EDISON
Catalog Number:	GWS-SA4B-830-U-AFL-W-GRSWH
Description:	GALLEON WALL SLIM LUMINAIRE. (4) LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS W/ FACTORY INSTALLED GLARE SHIELD, WH
Light Source:	(64) 3000K CCT, 80 CRI LEDS
Ballast/Driver:	-

Summary

Lumens per Lamp:	N/A
Luminaire Lumens:	10431.2 lumens
Efficiency:	N/A
Efficacy:	110.5 lumens/watt
Luminous Opening:	Rectangular (W 1' x L: 1' x H: 0')
IES Classification:	Type II - Short
BUG Rating:	B2 - U0 - G1

Input Watts (W):	94.4
Input Voltage (V):	120
Input Current (Ain):	NR
Voltage Rise (V):	NR
Power Factor:	NR
Total Harmonic Distortion (THDi):	NR
Frequency (hertz):	0
Stabilization Time:	NR
Operation Time:	NR
Ambient Temperature (°C):	NR
Test Distance:	28.75 FT

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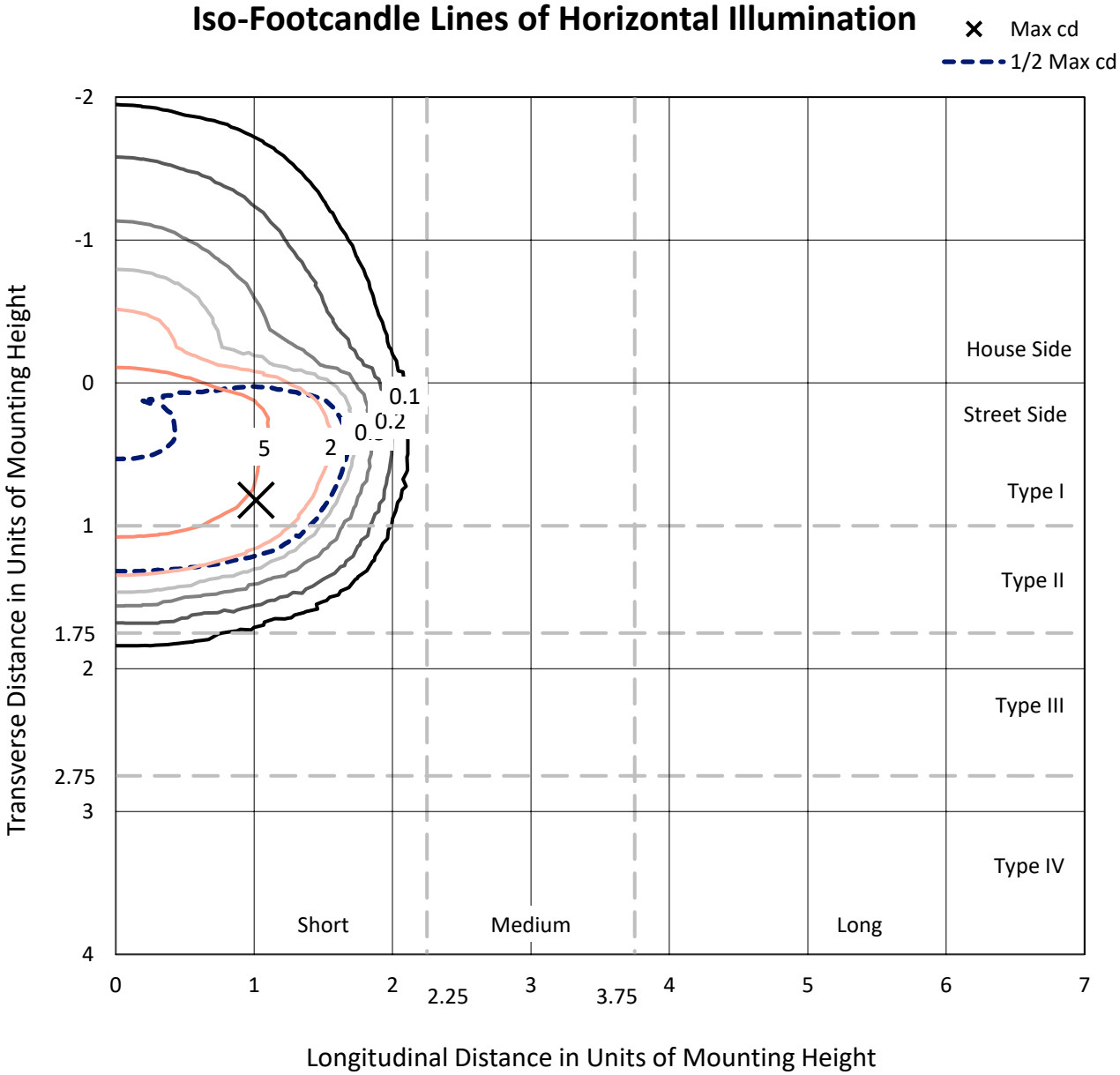
Scaled Data Report

REPORT NUMBER: P636978
CATALOG NUMBER: GWS-SA4B-830-U-AFL-W-GRSWH

Iso-Footcandle Lines of Horizontal Illumination



Based on 20 foot mounting height. Maximum calculated value = 9.5 fc
Type II - Short - N/A

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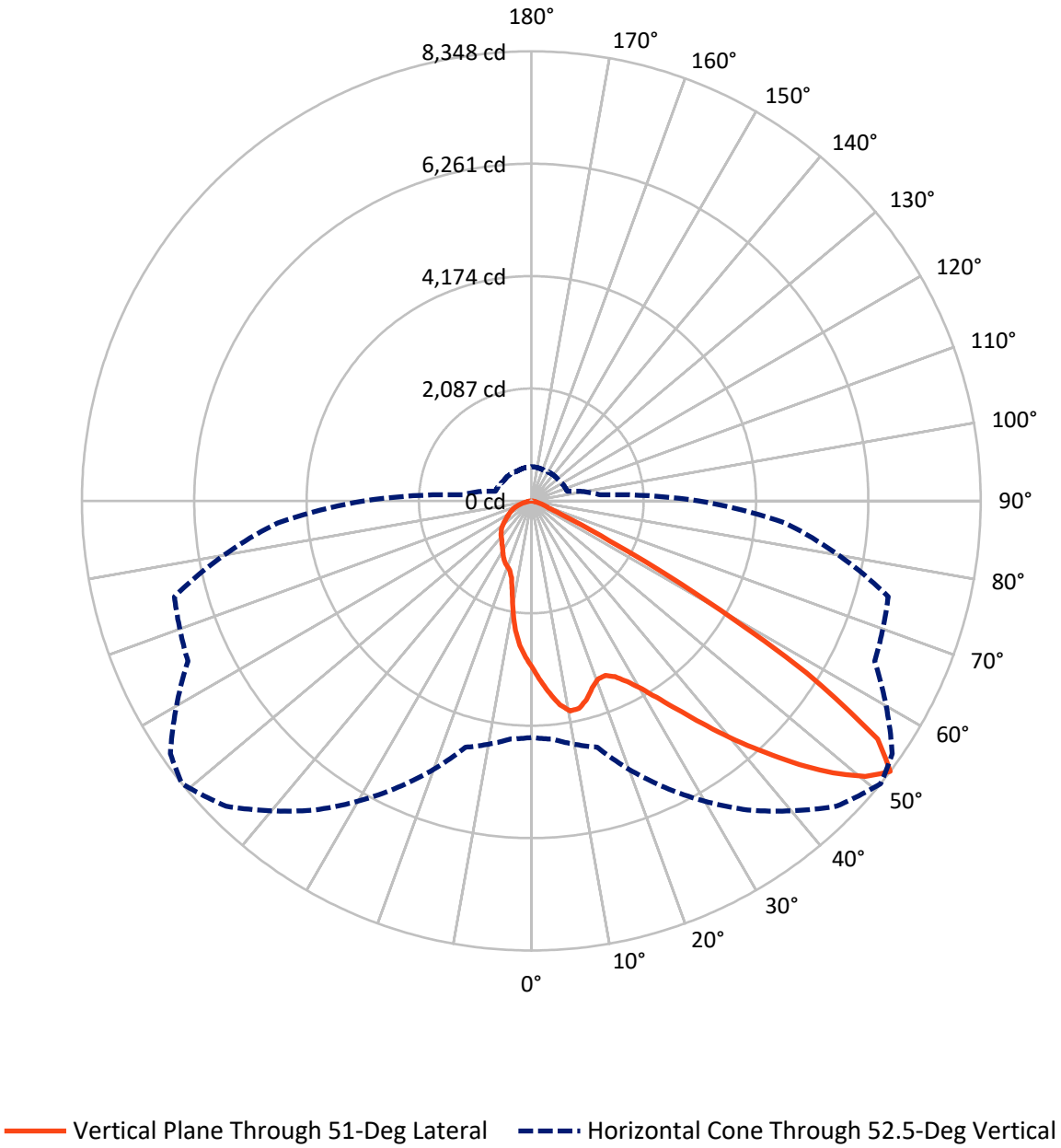
Luminous Intensity Polar Plot



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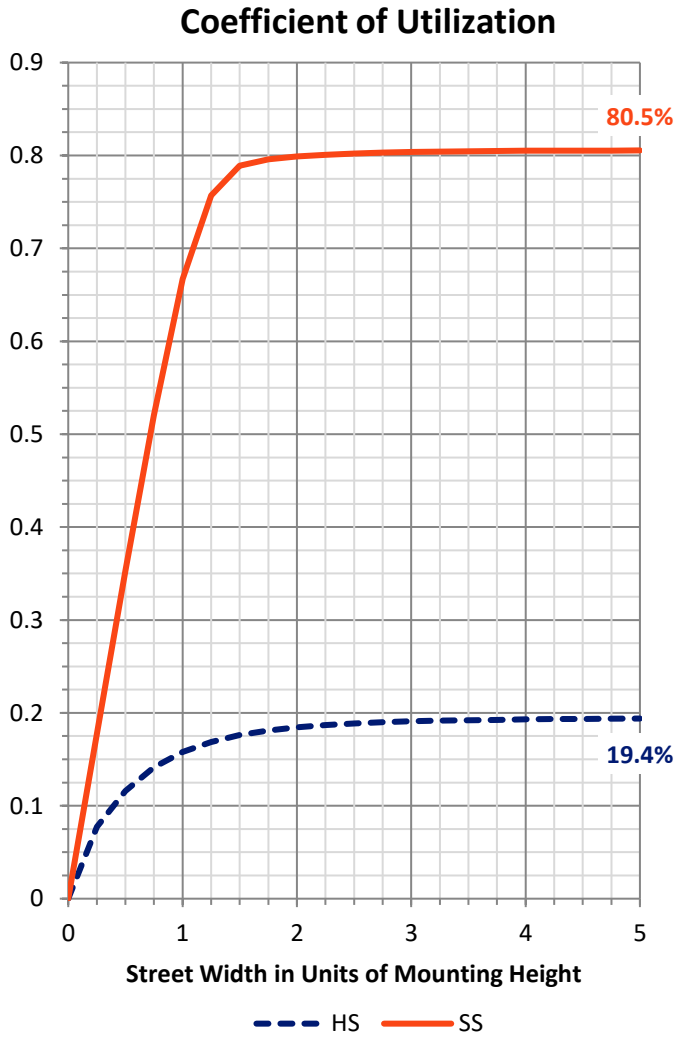
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2032.4	0.0	2032.4
	% Fixture	19.5	0.0	19.5
Street Side	Lumens	8398.8	0.0	8398.8
	% Fixture	80.5	0.0	80.5
Total	Lumens	10431.2	0.0	10431.2
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	289.8	2.8
10°-20°	753.1	7.2
20°-30°	1224.4	11.7
30°-40°	1940.5	18.6
40°-50°	2926.6	28.1
50°-60°	2531.8	24.3
60°-70°	574.0	5.5
70°-80°	169.2	1.6
80°-90°	21.8	0.2
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	10431.2	100.0
0°-180°	10431.2	100.0



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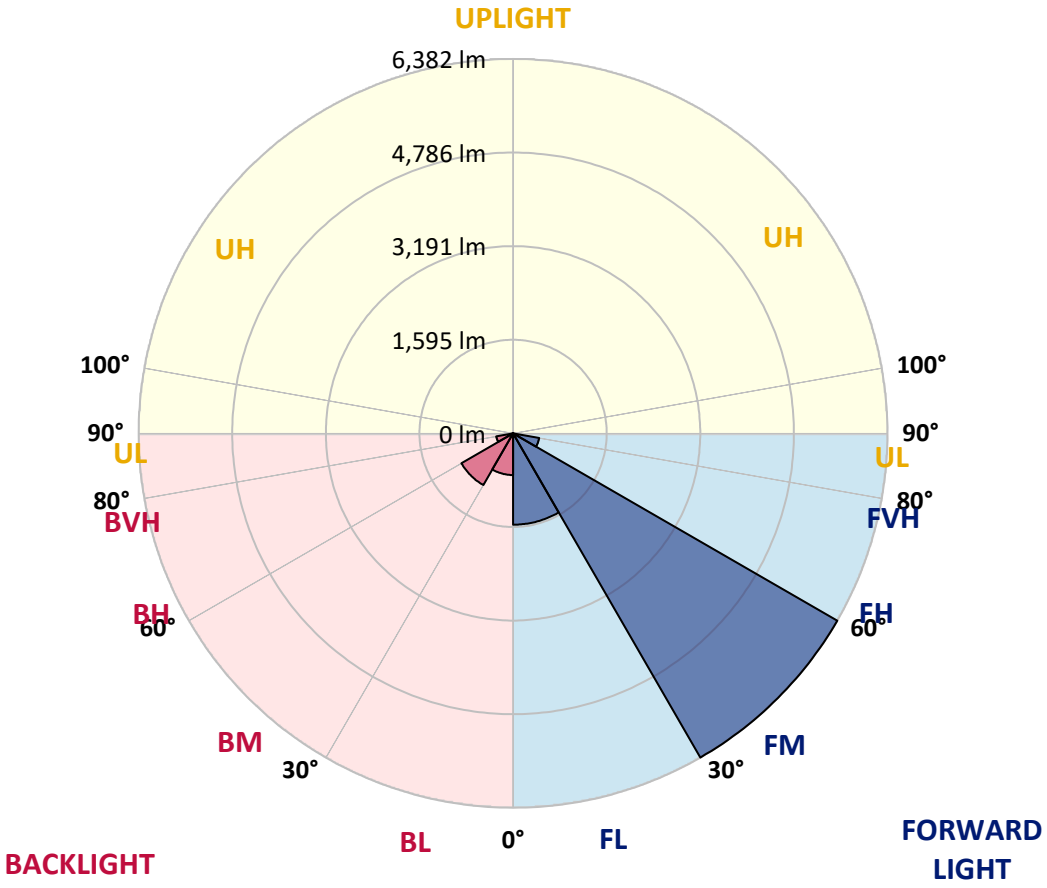
LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit B	U	G
FL	(0°-30°)	1556.9	14.9			
FM	(30°-60°)	6382.0	61.2			
FH	(60°-80°)	451.7	4.3			G0/660
FVH	(80°-90°)	8.2	0.1			G0/10
BL	(0°-30°)	710.5	6.8	B2/1000		
BM	(30°-60°)	1016.9	9.7	B2/2500		
BH	(60°-80°)	291.5	2.8	B1/500		G1/500
BVH	(80°-90°)	13.6	0.1			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1
Type II Short



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Scaled Data Report

REPORT NUMBER: P636978
CATALOG NUMBER: GWS-SA4B-830-U-AFL-W-GRSWH

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	51°	55°	65°	75°	85°
0°	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9
2.5°	3461.2	3480.9	3450.4	3438.9	3419.9	3387.0	3349.1	3338.3	3256.7	3203.2	3143.0
5°	3809.0	3819.7	3795.0	3770.3	3723.3	3664.8	3591.4	3575.7	3427.4	3304.5	3176.8
7.5°	3886.5	3882.4	3903.8	3917.8	3912.0	3889.0	3823.8	3793.3	3616.1	3421.6	3232.8
10°	3579.8	3556.8	3635.9	3729.9	3842.8	3973.0	3965.6	3963.1	3809.0	3579.0	3304.5
12.5°	3173.5	3161.9	3226.2	3344.1	3557.6	3846.1	3954.1	4038.1	3982.9	3729.0	3384.5
15°	2941.0	2936.9	2980.6	3065.5	3235.3	3599.6	3830.4	3996.9	4132.1	3889.8	3469.4
17.5°	2899.0	2901.5	2916.3	2964.9	3086.9	3387.0	3654.0	3886.5	4248.3	4066.2	3575.7
20°	3021.8	3038.3	3012.7	3020.2	3086.1	3310.3	3533.7	3775.2	4322.5	4243.4	3690.3
22.5°	3294.6	3288.9	3232.8	3199.9	3200.7	3357.3	3520.5	3723.3	4371.2	4415.7	3794.2
25°	3603.8	3597.2	3530.4	3457.0	3410.9	3485.1	3615.3	3778.5	4414.8	4573.1	3877.4
27.5°	3968.9	3948.3	3874.1	3780.2	3677.9	3710.1	3798.3	3927.7	4482.4	4728.1	3932.6
30°	4322.5	4346.4	4240.1	4128.8	4020.8	4001.1	4052.2	4169.2	4620.1	4909.4	3998.6
32.5°	4791.5	4783.3	4665.4	4520.4	4366.2	4351.4	4391.8	4498.9	4867.4	5160.0	4099.1
35°	5359.5	5361.1	5193.8	4997.6	4778.4	4738.8	4806.4	4910.2	5235.8	5499.6	4258.2
37.5°	5949.7	5947.2	5801.3	5578.7	5279.5	5223.5	5300.9	5378.4	5696.6	5962.0	4505.5
40°	6363.4	6379.9	6311.5	6194.5	5910.9	5774.1	5842.5	5896.1	6197.8	6506.0	4831.1
42.5°	6598.4	6623.1	6637.9	6708.0	6558.8	6412.9	6388.2	6416.2	6645.3	7011.3	5136.9
45°	6648.6	6681.6	6789.6	7049.2	7106.9	7065.7	6985.0	6917.4	6979.2	7369.9	5337.2
47.5°	6426.9	6484.6	6715.4	7169.6	7506.7	7636.1	7546.3	7443.3	7172.1	7462.2	5316.6
50°	5548.2	5615.8	6135.9	6924.0	7563.6	8035.1	8043.3	7890.8	7149.0	7196.0	5057.8
52.5°	4392.6	4438.8	4736.3	5869.7	7005.6	8018.6	8348.3	8185.1	7037.7	6863.0	4733.8
55°	2625.3	2699.5	2977.3	3872.5	5457.6	7106.9	7809.2	7888.4	6983.3	6583.5	4512.9
57.5°	886.1	922.4	1187.8	1710.4	3216.3	5203.7	6033.7	6355.2	6339.5	6156.6	4081.8
60°	422.0	430.3	483.9	648.7	1287.5	2719.3	3571.6	3942.5	4280.5	4314.3	2539.6
62.5°	321.5	326.4	353.6	389.1	517.6	1145.7	1637.0	1920.6	2051.6	1760.7	924.8
65°	268.7	272.8	293.4	315.7	352.0	496.2	628.1	724.5	652.8	508.6	441.0
67.5°	224.2	227.5	243.2	267.1	291.8	332.2	348.7	358.6	375.9	422.0	405.5
70°	175.6	178.9	195.4	216.0	239.9	249.8	265.4	275.3	309.9	369.3	367.6
72.5°	135.2	139.3	148.4	161.6	181.3	191.2	208.5	220.1	239.9	287.7	307.5
75°	98.9	101.4	109.6	113.8	116.2	113.8	131.1	144.2	170.6	188.8	193.7
77.5°	40.4	45.3	43.7	43.7	51.9	62.6	71.7	80.0	98.1	108.8	109.6
80°	16.5	18.1	21.4	23.9	28.8	37.1	42.9	46.2	54.4	61.0	65.9
82.5°	9.9	10.7	12.4	13.2	16.5	21.4	24.7	27.2	33.8	40.4	42.9
85°	4.9	4.9	5.8	6.6	8.2	9.9	11.5	13.2	17.3	21.4	23.9
87.5°	0.8	0.8	0.8	1.6	2.5	3.3	4.1	4.9	5.8	6.6	8.2
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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Scaled Data Report

REPORT NUMBER: P636978
CATALOG NUMBER: GWS-SA4B-830-U-AFL-W-GRSWH

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9	3105.9
2.5°	3107.5	3063.0	3011.1	2969.9	2922.1	2886.6	2836.3	2805.0	2775.4	2750.6	2732.5
5°	3110.8	3035.8	2927.8	2832.2	2733.3	2639.3	2542.9	2464.6	2394.5	2336.0	2331.1
7.5°	3129.8	3021.8	2852.8	2685.5	2492.6	2306.3	2120.0	1968.4	1853.0	1792.8	1780.4
10°	3161.9	3020.2	2776.2	2509.1	2180.2	1880.2	1659.3	1543.9	1477.1	1453.2	1445.0
12.5°	3195.7	3016.0	2678.1	2260.2	1803.5	1540.6	1419.4	1405.4	1417.8	1419.4	1418.6
15°	3236.9	3013.6	2554.4	1968.4	1528.2	1383.1	1391.4	1421.1	1449.9	1456.5	1456.5
17.5°	3287.2	3007.8	2386.3	1683.2	1355.9	1352.6	1396.3	1435.9	1463.1	1468.0	1468.0
20°	3340.0	2993.0	2179.4	1450.7	1285.9	1333.7	1380.7	1411.2	1430.1	1436.7	1437.5
22.5°	3376.3	2953.4	1941.2	1278.5	1242.2	1297.4	1331.2	1362.5	1362.5	1346.0	1341.1
25°	3383.7	2868.5	1683.2	1160.6	1190.3	1241.4	1276.0	1257.9	1224.1	1210.9	1210.0
27.5°	3356.5	2744.9	1428.5	1076.5	1127.6	1178.7	1173.0	1146.6	1131.7	1118.5	1123.5
30°	3323.5	2596.5	1207.6	1007.3	1055.1	1105.4	1085.6	1076.5	1065.8	1051.0	1054.3
32.5°	3301.2	2430.8	1037.8	953.7	1006.4	1014.7	1028.7	1027.9	1018.0	990.0	988.3
35°	3307.8	2263.5	924.0	910.0	966.1	962.8	989.1	984.2	915.8	877.0	874.6
37.5°	3360.6	2102.7	857.3	875.4	901.8	922.4	945.4	886.1	862.2	837.5	839.1
40°	3461.2	1953.5	821.0	856.4	863.0	893.5	839.9	839.1	828.4	806.1	805.3
42.5°	3574.9	1827.4	796.3	847.4	838.3	844.1	787.2	793.8	793.0	778.9	774.8
45°	3644.1	1711.2	776.5	813.6	816.0	758.3	741.0	748.4	752.6	745.1	744.3
47.5°	3572.4	1577.7	755.9	761.6	783.1	719.6	698.2	699.0	706.4	707.2	703.9
50°	3371.3	1428.5	731.1	717.1	703.1	679.2	659.4	655.3	662.7	670.1	672.6
52.5°	*3111.7*	*1285.9*	*689.9*	*668.5*	*635.5*	*635.5*	*626.5*	*613.3*	*623.2*	*633.0*	*636.3*
55°	2921.2	1180.4	631.4	607.5	571.2	583.6	581.9	570.4	583.6	591.0	593.5
57.5°	2531.4	948.7	555.6	548.1	517.6	532.5	535.8	520.9	514.4	516.0	518.5
60°	1502.7	612.4	501.2	500.3	473.1	490.4	500.3	485.5	465.7	468.2	471.5
62.5°	674.3	468.2	432.7	429.5	428.6	450.9	461.6	447.6	419.6	422.0	425.3
65°	424.5	404.7	375.9	375.9	389.1	408.0	416.3	404.7	372.6	368.5	371.8
67.5°	394.0	376.7	347.0	341.3	347.8	363.5	364.3	342.1	323.1	319.8	319.8
70°	353.6	340.4	311.6	300.0	297.6	296.7	294.3	288.5	276.1	272.8	274.5
72.5°	292.6	283.6	265.4	253.1	246.5	245.6	235.7	230.8	220.1	218.4	217.6
75°	193.7	196.2	196.2	194.5	188.8	186.3	175.6	170.6	158.3	153.3	152.5
77.5°	114.6	117.0	120.3	121.2	120.3	120.3	110.5	104.7	92.3	85.7	84.1
80°	70.1	71.7	73.4	75.8	72.5	70.1	61.0	55.2	49.5	45.3	44.5
82.5°	45.3	47.0	47.8	49.5	47.8	44.5	37.1	33.8	29.7	26.4	25.6
85°	25.6	26.4	28.0	28.0	25.6	23.1	19.0	16.5	14.0	12.4	12.4
87.5°	9.1	9.1	9.1	9.9	8.2	7.4	4.9	3.3	2.5	2.5	2.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

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LM-79-2019: Approved Method: Electrical and Photometric Measurements of Solid-State Lighting Products

Report Prepared for

Cooper Lighting Solutions

MCGRAW EDISON

Report Number: SP1-2408-195-9

Test Date: 08/07/2024

Luminaire Tested: GALN-SB1A-830-U-5WQ

Data in this report applies to families of products including GALN-SB1A-830-U-5WQ.

Report Generated By FNC07603 / LDUCLS01DT446
Version: v7.04

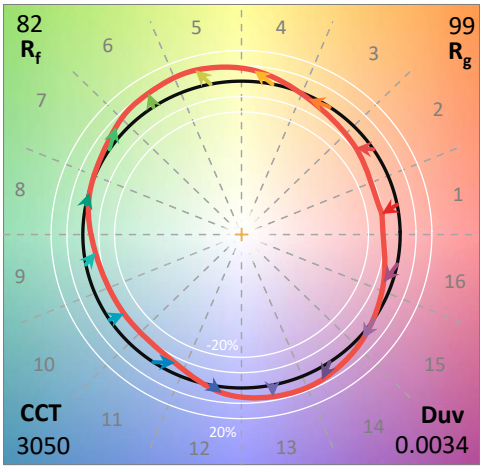
Test Information

Test Method:	LM-79-2019
Report Number:	SP1-2408-195-9
Test Lab:	COOPER LIGHTING SOLUTIONS
Photometer:	SP1 - 76IN SPHERE
Measurement Geometry:	4π
Issue Date:	08/07/2024
Manufacturer:	COOPER LIGHTING SOLUTIONS
Product Line:	MCGRAW EDISON
Catalog Number:	**GALN-SB1A-830-U-5WQ**
Description:	GALLEON AREA AND ROADWAY LUMINAIRE. (1) 80 CRI, 3000K, 350MA HIGH DENSITY LIGHTSQUARE WITH 26 LEDS AND TYPE V WIDE OPTICS

Spectral Parameters

CCT (K):	3050	CRI (Ra):	81.0		
CIE u':	0.2476	R1:	79.6	R9:	7.1
CIE v':	0.5251	R2:	85.6	R10:	67.0
Duv:	0.0034	R3:	92.0	R11:	82.7
CIE x:	0.4383	R4:	82.6	R12:	63.2
CIE y:	0.4131	R5:	78.9	R13:	80.3
CIE z:	0.1487	R6:	81.7	R14:	95.0
Peak Wavelength (nm):	603	R7:	85.2	R15:	71.7
Dominant Wavelength (nm):	581	R8:	62.0		
Purity:	55.55201				

Rf:	81.5
Rg:	99.2



Test Conditions

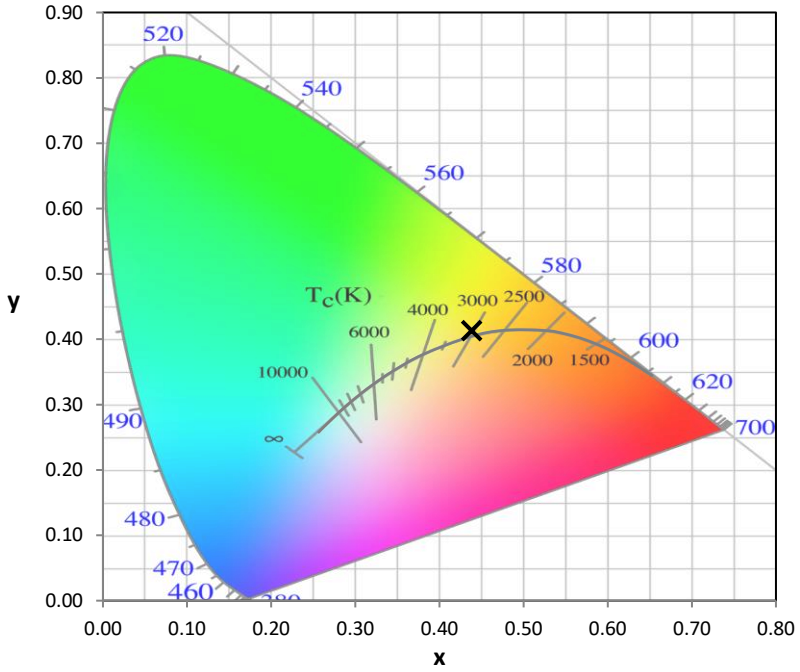
Stabilization Time:	20M
Operation Time:	1H 20M
Sphere Temperature (°C):	24.2

REPORT NUMBER: SP1-2408-195-9

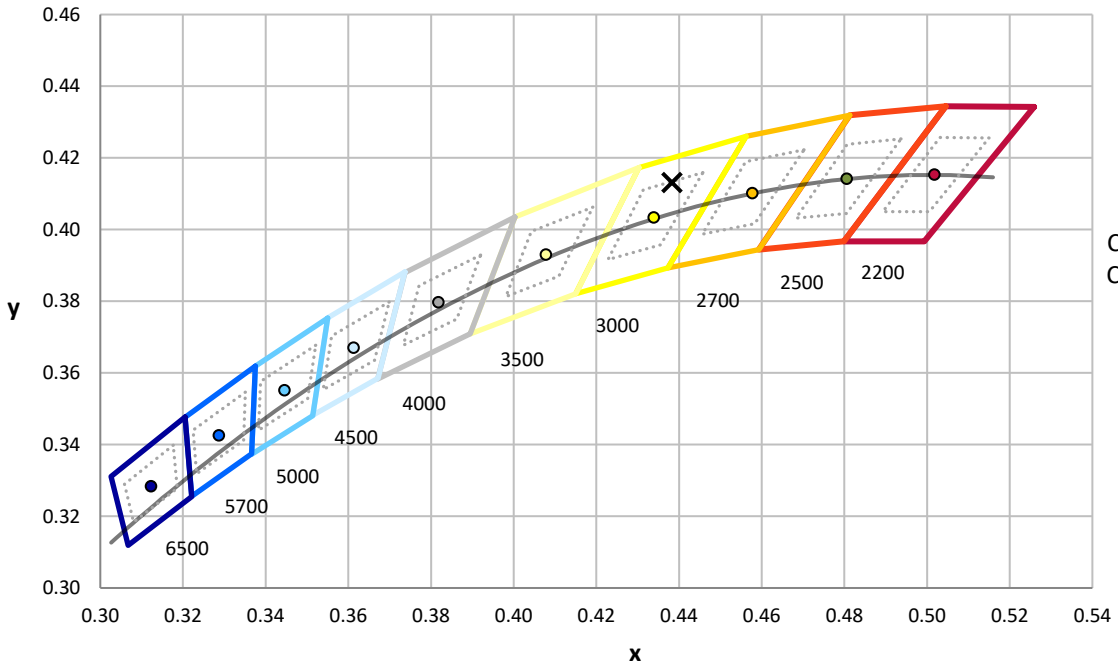
Measurement and Test Equipment			
Instrument	Identification Number	Calibration Date	Calibration Due Date
Photometer	IN0058	6/18/2024	12/18/2024
Power Meter	INXT2011004	2/8/2024	2/8/2025
AC Power Source	IN0063	10/24/2023	10/24/2024
DC Power Source	IN0208	10/24/2023	10/24/2024
Sphere Thermometer	IN0085	10/24/2023	10/24/2024
Room Thermometer	IN0046	10/24/2023	10/24/2024

REPORT NUMBER: SP1-2408-195-9

CIE 1931 Chromaticity Diagram



CIE 1931 Chromaticity Diagram with 2017 ANSI 7-Step and 4-Step Quadrangles

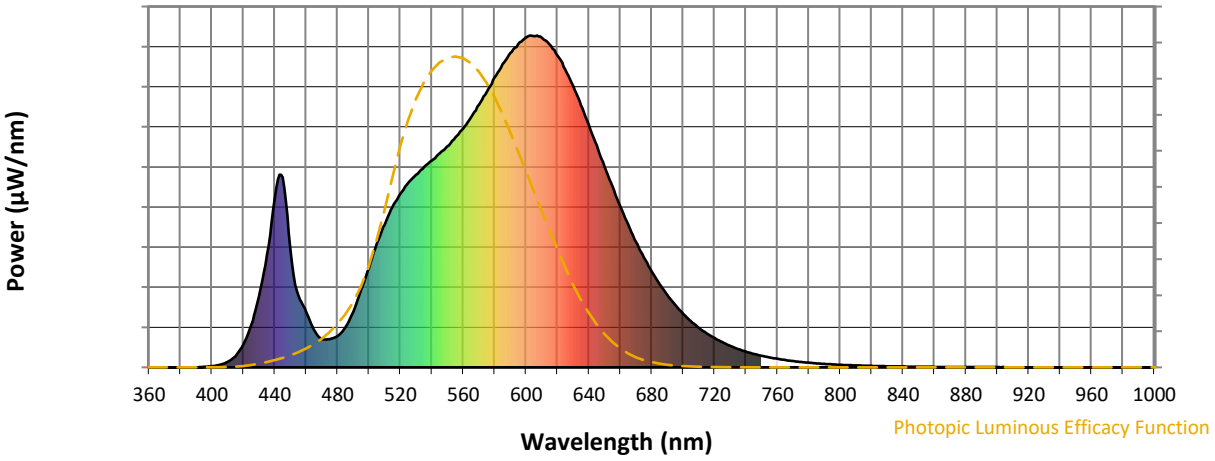


CCT = 3050K
CIE x = 0.4383
CIE y = 0.4131
Duv = 0.0034

Point lies inside the ANSI 3000K 4-step quadrangle

REPORT NUMBER: SP1-2408-195-9

Photopic Flux vs. Wavelength

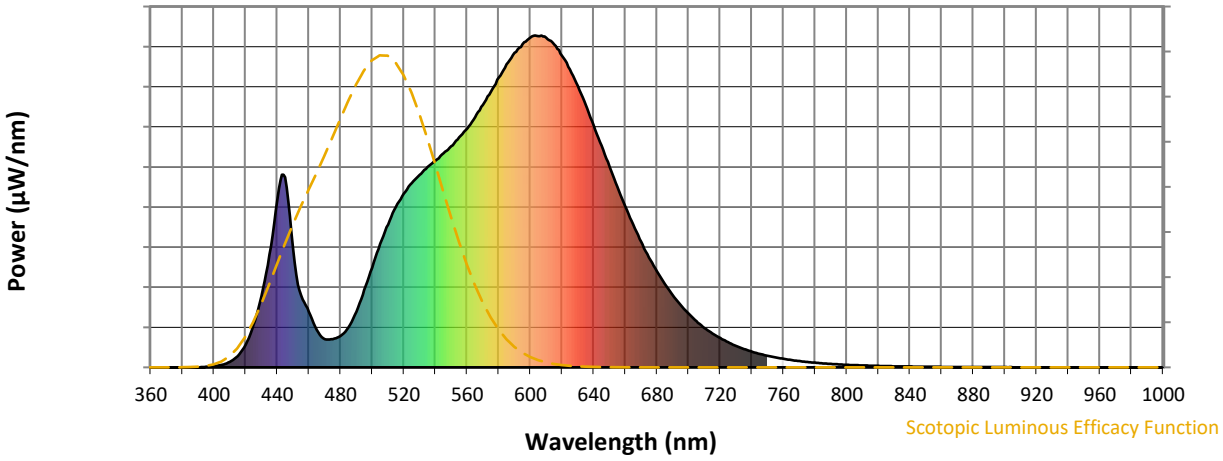


Photopic Lumens: NR

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Scotopic Flux vs. Wavelength

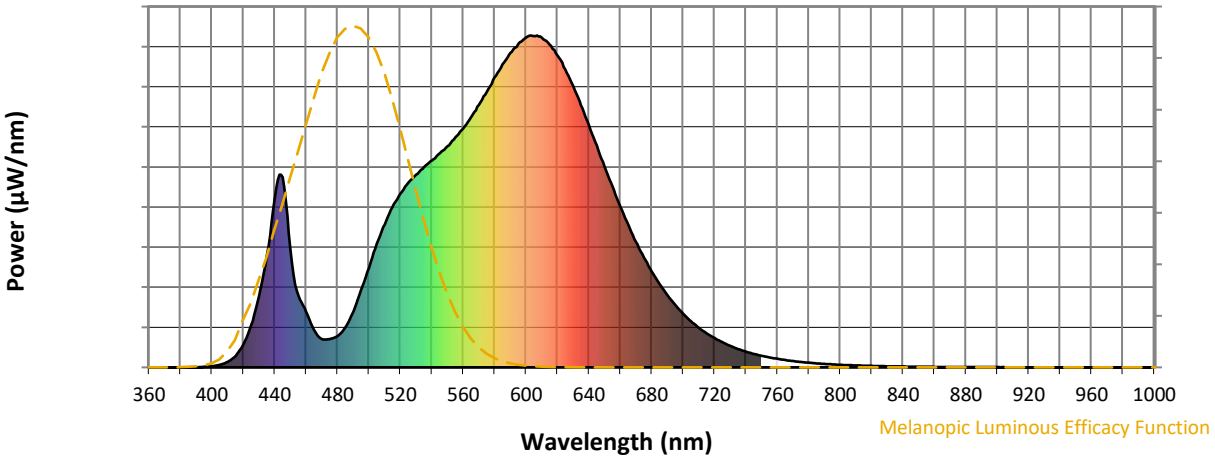


Scotopic Lumens: NR **S/P: 1.27**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

REPORT NUMBER: SP1-2408-195-9

Melanopic Flux vs. Wavelength



Melanopic Lumens: NR **M/P: 2.32**

λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)	λ (nm)	Power W^/nm	Lumens (ϕ/nm)
360	0	NR	490	168	NR	620	940	NR	750	35	NR	880	1	NR
365	0	NR	495	233	NR	625	897	NR	755	30	NR	885	1	NR
370	0	NR	500	300	NR	630	847	NR	760	26	NR	890	1	NR
375	0	NR	505	372	NR	635	790	NR	765	22	NR	895	1	NR
380	0	NR	510	430	NR	640	730	NR	770	19	NR	900	1	NR
385	0	NR	515	483	NR	645	668	NR	775	16	NR	905	1	NR
390	0	NR	520	524	NR	650	605	NR	780	14	NR	910	0	NR
395	2	NR	525	555	NR	655	545	NR	785	12	NR	915	0	NR
400	4	NR	530	581	NR	660	485	NR	790	10	NR	920	0	NR
405	7	NR	535	604	NR	665	430	NR	795	9	NR	925	0	NR
410	17	NR	540	623	NR	670	378	NR	800	8	NR	930	0	NR
415	34	NR	545	645	NR	675	331	NR	805	7	NR	935	0	NR
420	68	NR	550	667	NR	680	290	NR	810	6	NR	940	0	NR
425	128	NR	555	693	NR	685	251	NR	815	5	NR	945	0	NR
430	214	NR	560	719	NR	690	218	NR	820	4	NR	950	0	NR
435	339	NR	565	754	NR	695	188	NR	825	4	NR	955	0	NR
440	507	NR	570	791	NR	700	162	NR	830	3	NR	960	0	NR
445	573	NR	575	830	NR	705	139	NR	835	3	NR	965	0	NR
450	356	NR	580	873	NR	710	119	NR	840	3	NR	970	0	NR
455	217	NR	585	913	NR	715	102	NR	845	2	NR	975	0	NR
460	168	NR	590	948	NR	720	88	NR	850	2	NR	980	0	NR
465	113	NR	595	974	NR	725	76	NR	855	2	NR	985	0	NR
470	85	NR	600	994	NR	730	65	NR	860	1	NR	990	0	NR
475	85	NR	605	998	NR	735	55	NR	865	1	NR	995	0	NR
480	94	NR	610	994	NR	740	47	NR	870	1	NR	1000	0	NR
485	120	NR	615	973	NR	745	41	NR	875	1	NR			

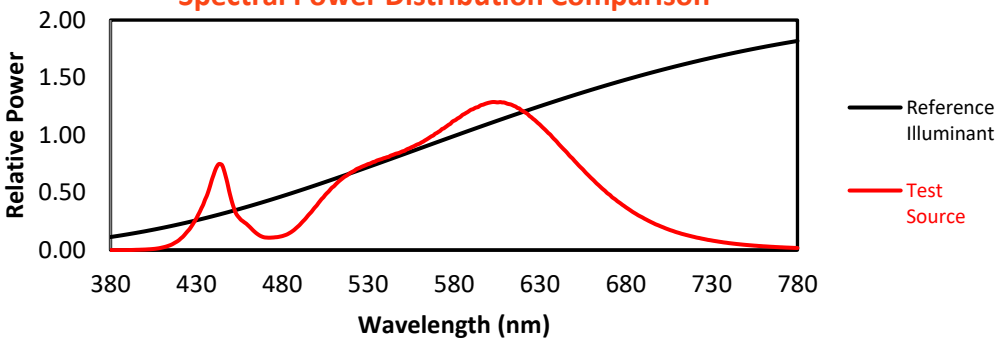
REPORT NUMBER: SP1-2408-195-9

TM-30-18

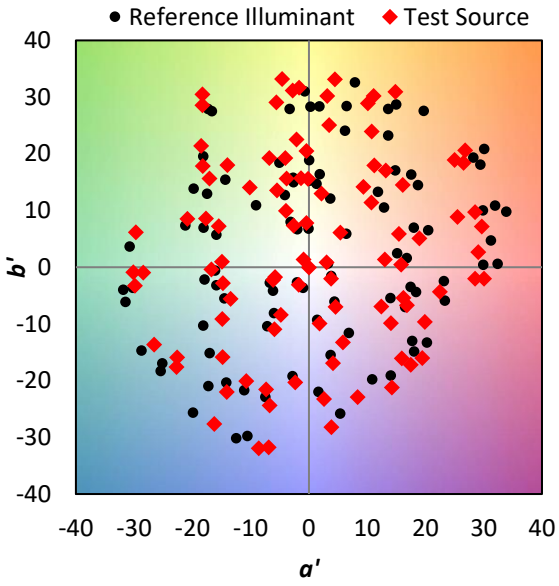
Summary

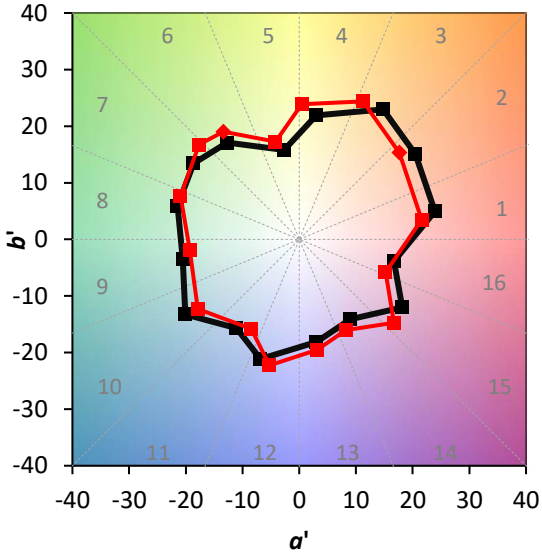
R_f = 81.5
R_g = 99.2
CIE R_a = 81.0
R_9 = 7.1

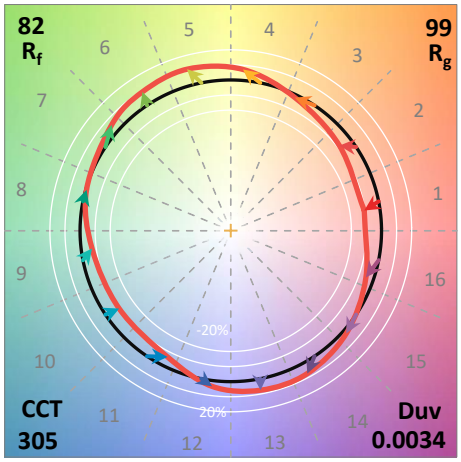
Spectral Power Distribution Comparison

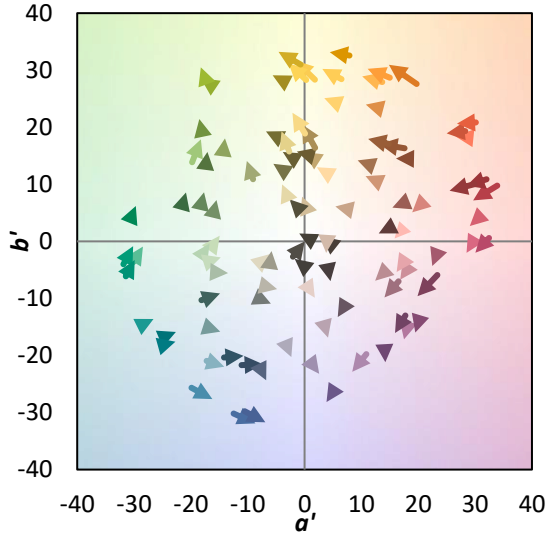


Color Vector Graphics







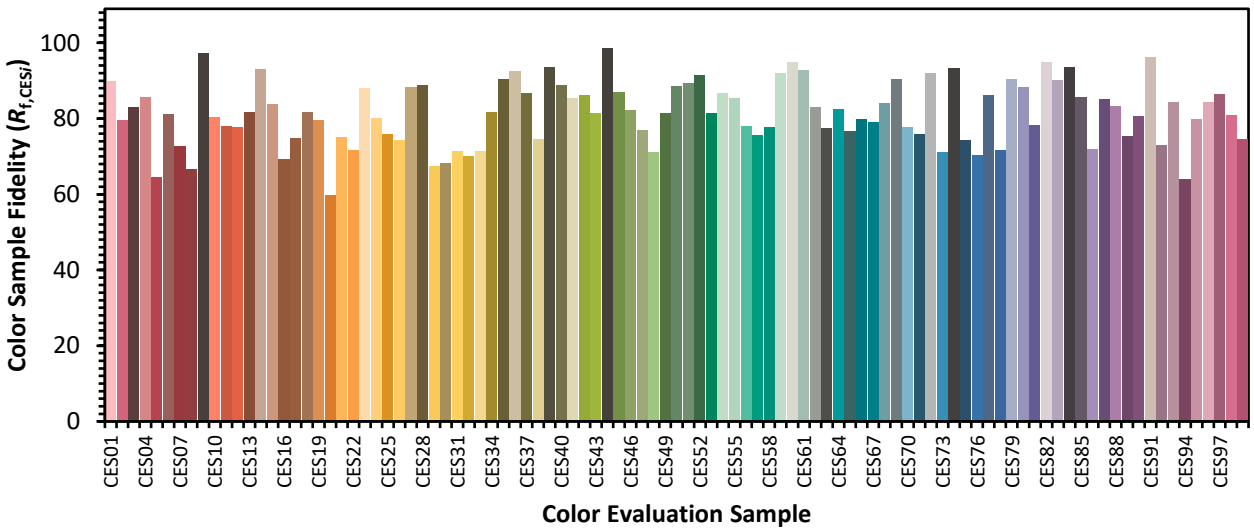


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Individual Sample Fidelity Index ($R_{f,i}$)

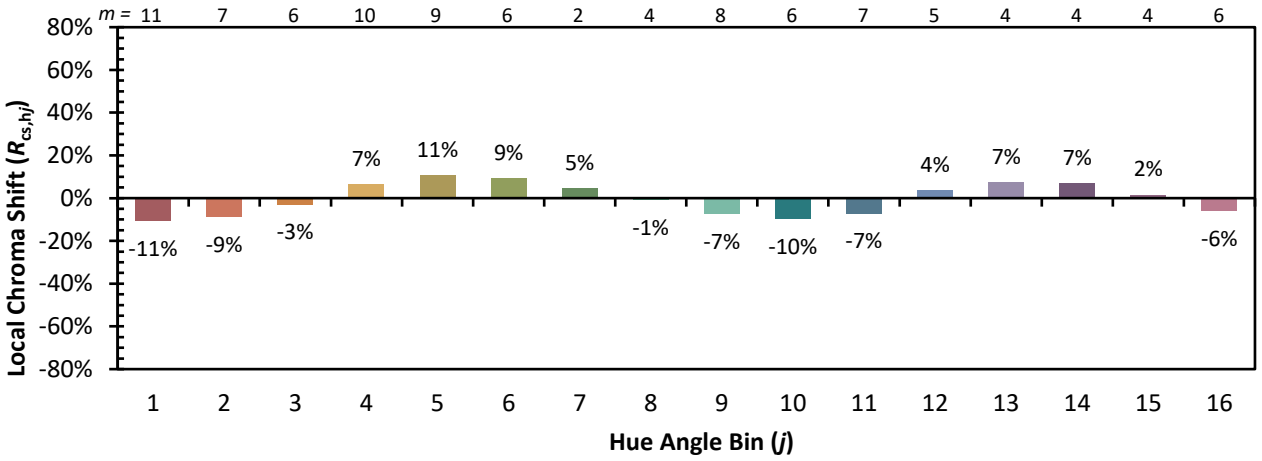
CES01 = 86	CES26 = 74	CES51 = 89	CES76 = 70
CES02 = 63	CES27 = 88	CES52 = 92	CES77 = 86
CES03 = 31	CES28 = 89	CES53 = 81	CES78 = 72
CES04 = 70	CES29 = 67	CES54 = 87	CES79 = 90
CES05 = 50	CES30 = 68	CES55 = 85	CES80 = 88
CES06 = 51	CES31 = 71	CES56 = 78	CES81 = 78
CES07 = 42	CES32 = 70	CES57 = 76	CES82 = 95
CES08 = 41	CES33 = 71	CES58 = 78	CES83 = 90
CES09 = 29	CES34 = 82	CES59 = 92	CES84 = 94
CES10 = 76	CES35 = 90	CES60 = 95	CES85 = 86
CES11 = 59	CES36 = 93	CES61 = 93	CES86 = 72
CES12 = 65	CES37 = 87	CES62 = 83	CES87 = 85
CES13 = 43	CES38 = 75	CES63 = 77	CES88 = 83
CES14 = 74	CES39 = 94	CES64 = 83	CES89 = 75
CES15 = 71	CES40 = 89	CES65 = 77	CES90 = 81
CES16 = 47	CES41 = 85	CES66 = 80	CES91 = 96
CES17 = 50	CES42 = 86	CES67 = 79	CES92 = 73
CES18 = 56	CES43 = 81	CES68 = 84	CES93 = 84
CES19 = 72	CES44 = 99	CES69 = 91	CES94 = 64
CES20 = 66	CES45 = 87	CES70 = 78	CES95 = 80
CES21 = 87	CES46 = 82	CES71 = 76	CES96 = 84
CES22 = 79	CES47 = 77	CES72 = 92	CES97 = 87
CES23 = 92	CES48 = 71	CES73 = 71	CES98 = 81
CES24 = 91	CES49 = 81	CES74 = 93	CES99 = 74
CES25 = 72	CES50 = 89	CES75 = 74	

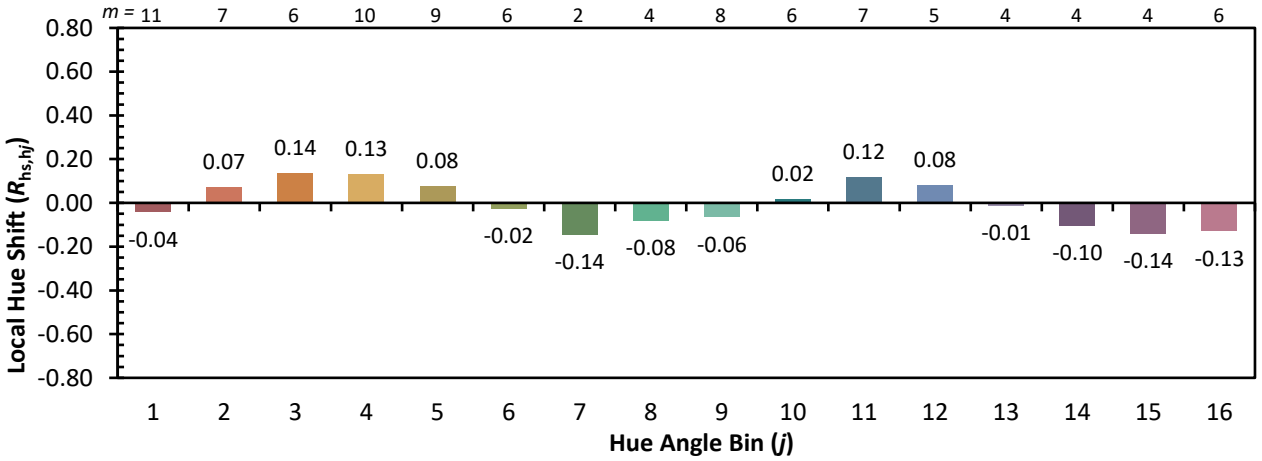


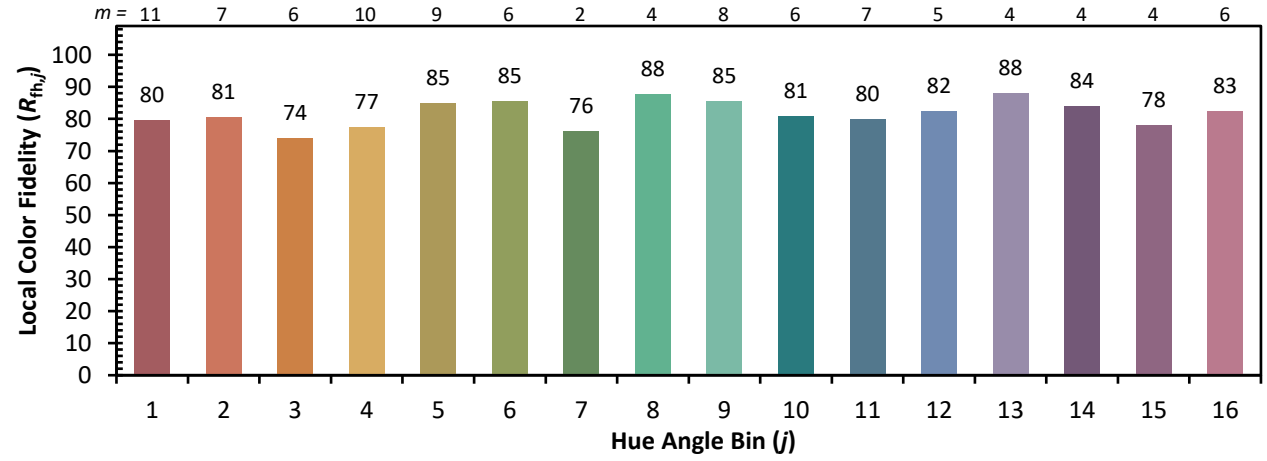
REPORT NUMBER: SP1-2408-195-9

TM-30-18

Color Rendition by Hue-Angle Bin



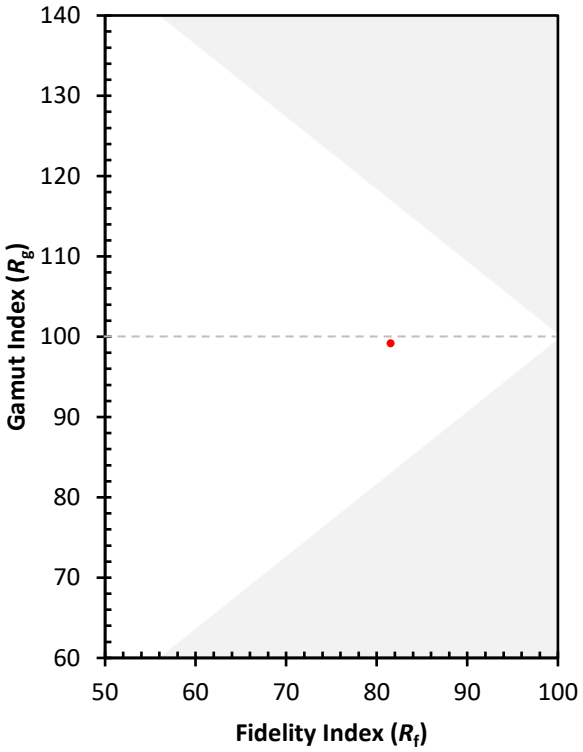


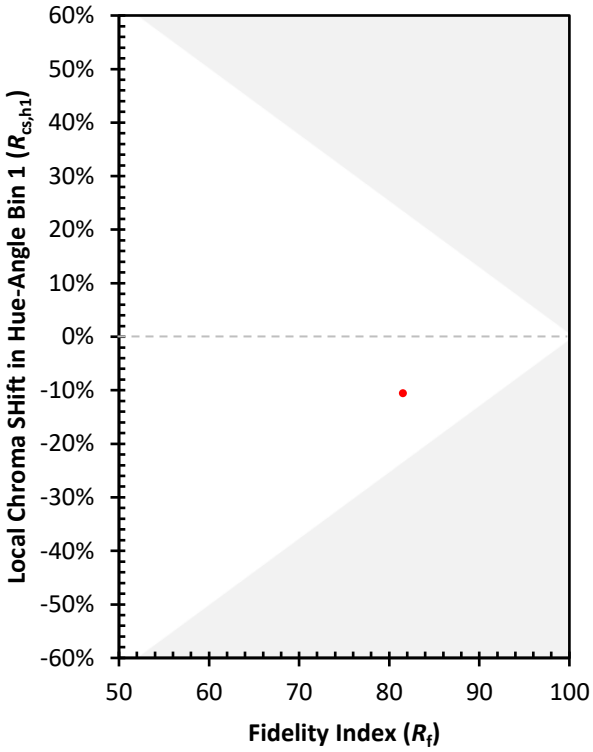


REPORT NUMBER: SP1-2408-195-9

TM-30-18

Measure Comparisons





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